

How did you meet that very special Valentine?



Loves me



....Loves me not!

February 14 has fond memories for many people. Cupid's arrow sometimes strikes in peculiar places and peculiar circumstances. In a Division-wide random selection, no two people met under the same conditions. Our "Answer Box" for this issue has compiled some of these happy times.

Some of the more interesting dialogues came from anonymous sources. Since almost everyone has a "Valentine," we thought it might be intriguing to find how others met theirs.

And how did you meet your "Valentine?"

◀ **Alice and Everett "Rich" Richardson**, both ORNL employees, were the willing "victims" of cupid, Harry R. Livesay, Metals and Ceramics Division. Livesay suggested to Alice: "You ought to meet that guy down the hall." A similar suggestion was made to Rich.

Richardson says, "It took me a while, but I finally worked up the nerve to ask her out." Alice is quick to add: "He gave me two weeks notice for that first date! After we were married (March 4, 1972), I asked him why the two weeks warning?"

"I wanted to make sure you didn't have any other plans," says Richardson. Alice is senior illustrator in the Graphic Arts Department; Rich, an engineer, works at the Van de Graaff Accelerator.

Y-12's Dispatching offers an interesting encounter. **Pat H. Walker** was working on a proof machine in a local bank. Her husband-to-be, **Steve**, managed a supermarket and made frequent deposits at Pat's bank. She asked for a transfer to a teller position so she could meet the man. It was so arranged, she met and later married Steve.

Paducah's Engineering Division provides **Gene R. Miller**, engaging in a little "horse play" to win his lady love. "I met my wife, Sue, in our high school chemistry class. I was immediately smitten; however, to

attract her attention, I resorted to blowing bromine in her face during a lab experiment. This came close to ending our relationship as she was nearly asphyxiated. Sue never forgot me after that and two years later we were married. We will celebrate our 25th wedding anniversary this year, and we have four children. On Valentine's Day we exchange cards and occasionally a small token gift. I'm sure at some time on this day we both pause to consider the special moments and events in the years of life we have shared."

Many couples claim they "fell" for their spouse...but few can say it with the authority of **Bob E. Fox**, a pipe-fitter in ORNL's Plant and Equipment Division. "Not only did I fall for my wife the first time we met, but the second time was a near accident, too!"

Fox's first encounter with his wife **Jonnie**, was in 1952 in a ladies' lounge in Building 1401 at ORGDP. Jonnie, a record clerk in Special Shops, was on the couch when the ceiling started caving in. "The next thing I knew, a man's body appeared from the waist down," she remembers. "His fall was stopped by the sheet metal duct."

The Foxes' second meeting happened two days later when Fox's foot again went through a sheet-rock ceiling...this time above his wife's office desk. The couple was officially introduced by match-making friends. Fox says, "I remember asking for her phone number right off the bat. Her reply was to point to the plant phone on her desk."

Three months later, the Foxes married. They live in Lenoir City and have three daughters: Susan, Lea Ann and Frances Blackburn, an ORNL employee.

Eddreana Powell, a secretary in ORNL's Central Management Division, met her husband, **Robert**, while she was co-oping at the Y-12 Plant. "He came up to me at the coat rack one day and asked how I was liking Oak Ridge," says Eddreana. "Two weeks later we had our first date...and we've been dating ever since!" The Powells were married July 6, 1973.

Robert is now an employee in the Engineering Division at ORGDP.

Sandy Whitaker, ORGDP Superintendents' Division, met her valentine through the match-making abilities of relatives. "My aunt

(Please see page 8)

Toll enrichment tops \$421 million during 1977

More than \$421 million in toll enrichment services were recorded at ORGDP during 1977. This compares to \$332 million in calendar year 1976, and \$253 million in 1975.

Under the Toll Enrichment Program, privately licensed owners bring their uranium to the Gaseous Diffusion Plant for enriching on a toll basis. Customers are charged for the services required to separate from natural uranium the desired percentage of uranium-235 isotope, usually between two and three percent.

During 1977, reactor facilities in 20 states and eight foreign countries participated in the Toll Enrichment Program at ORGDP. The \$421 million in services was for enrichment furnished to more than 3,300,000 pounds of customer uranium.

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This lonely little Christmas tree got a post-holiday decoration at the Paducah Plant recently, as 18 inches of snow inundated the place. "Business as usual" was hardly the word for the scrambling around in traffic and the jam-ups in the parking lots. It was, however, a convivial scene with people good-naturedly helping people. Other photos are on pages 4 and 5.

safety scoreboard

Time worked without a lost-time accident throught January 26:

Paducah.....	188	2,365,225 Man-Hours
ORGDP.....	8 Days	271,600 Man-Hours
Y-12 Plant.....	8 Days	223,000 Man-Hours
ORNL.....	11 Days	244,774 Man-Hours



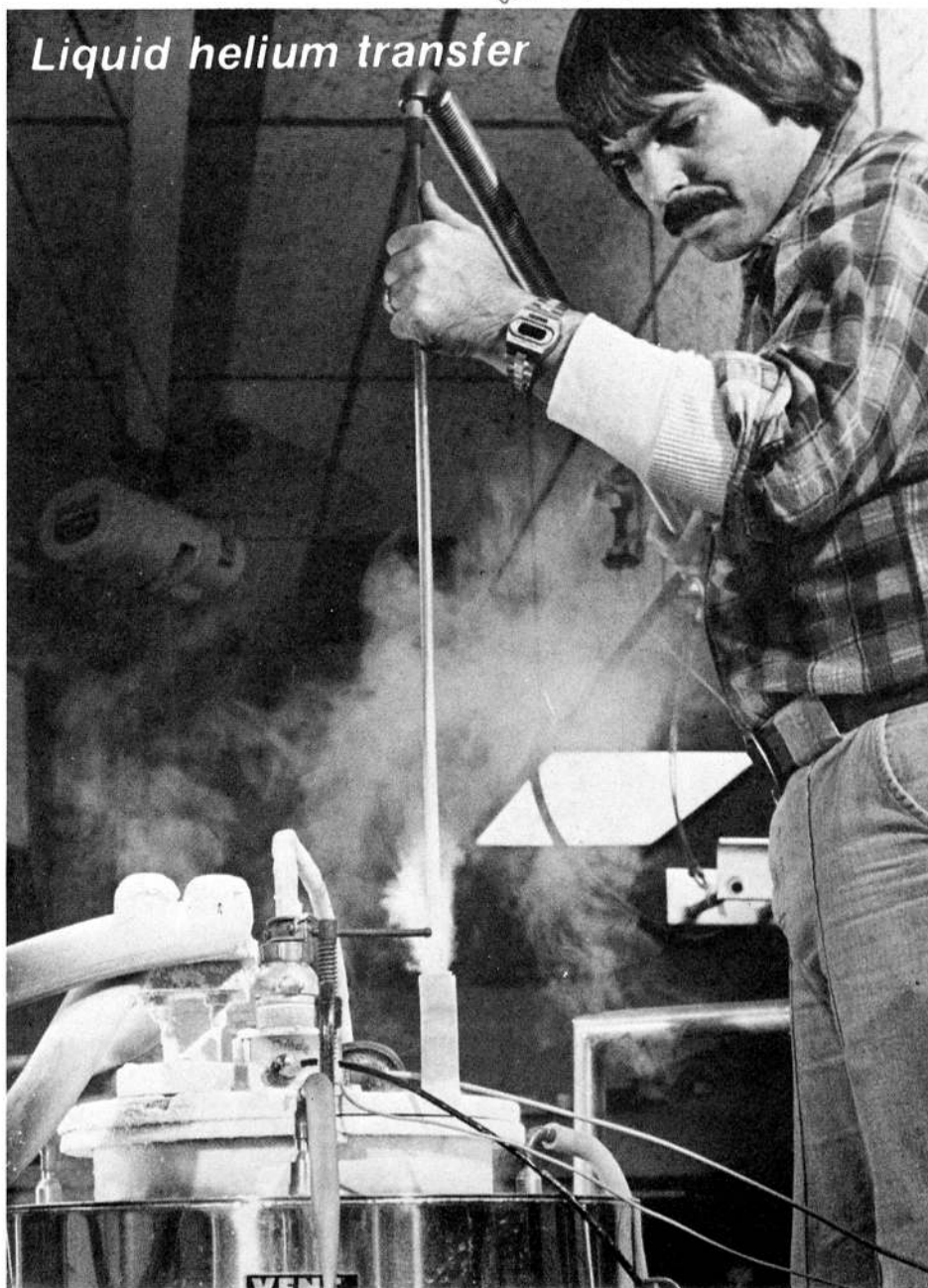
SUCCESSFUL 'STUFF-IT' CAMPAIGN—The Paducah Gaseous Diffusion Plant recently completed a successful 'Stuff-It' campaign to clean up litter in the place. Using football as its theme, the 15-man team, coached by Clyde C. Hopkins, plant manager, combined talents to knock heads with plant housekeeping problems. A video-tape show also highlighted some of the planned activities. 'Stuff-It' bags and buttons were distributed throughout the area, as the entire staff got in on the act. Fire prevention awareness was also stressed during the campaign. Above, Hopkins receives final instructions from commentator Glenn (Cosell) Vancil. They are seen in the lower right, along with some other members of the team.

ORGDP safety meeting has 'Safety Bowl' theme



SAFETY BOWL—With some Broncomania of its own, the General Accounting Division recently staged a 'Safety Bowl' audience participation safety meeting, complete with quarterbacks, cheerleaders and all. While accounting is not a particularly hazardous discipline, the division is still proud of its contributions to the safe working habits of the entire complex. From left are Mike Lively, Pam Farmer, Martha Walker, Jeanette Roberts, Karren Cochran, Bobby Allen, Jim Stewart, Bob Green, with Bob Resseguie, seated, who acted as clock operator. The program was coordinated by Ron Barry.

Liquid helium transfer



LOW-TEMPERATURE RESEARCH—Louis Alley, a technician in the Magnetics and Superconductivity Section of ORNL's Fusion Energy Division, transfers liquid helium—at a temperature of several hundred degrees below zero—from a storage vessel into a dewar containing an experimental cryogenic apparatus. Studies investigating the behavior of materials at very low (cryogenic) temperatures are important to the success of the nation's magnetic fusion energy research program, since the superconducting magnets that will be used to confine the plasma fuel in future fusion reactors can operate only at these temperatures.

Animals on the reservation...



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PADUCAH
Darlene MacPherson, Bell 208

about people...

Theodore F. Wagner, Central Employment, was recently awarded the Army Commendation Medal for meritorious service as director of the command and general staff department of the 3292 Knoxville U.S. Army Reserve School. Wagner, who holds a colonel's commission, has been in both active and reserve status in military service since 1939. He was recently placed in the inactive reserves.



Seven ORNL metallurgists and support personnel have received DOE citations in recognition of their "substantial and invaluable contributions to the nation's program of scientific outer-planetary studies."

DOE commended the Laboratory for its role in the development of the Multi-Hundred Watt Radioisotope Thermoelectric Generators to provide power aboard the Voyager 1 and 2 spacecrafts.

Receiving citations were: **Henry Inouye**, **Donald E. Harasyn**, **Karen H. Galloway**, **Anthony Schaffhauser**, **Chain T. Liu**, **Richard L. Heestand**—all of the Metals and Ceramics Division—and **William O. Graves**, Finance and Materials.

Pictured in front row, left to right, are: Inouye, Harasyn, Galloway, Schaffhauser and John E. Cunningham, associate director of M&C. Back row: James R. Weir, director of M&C, Donald B. Trauger, a Laboratory associate director, Liu, Heestand, Ralph G. Donnelly, section head in M&C, and Graves.

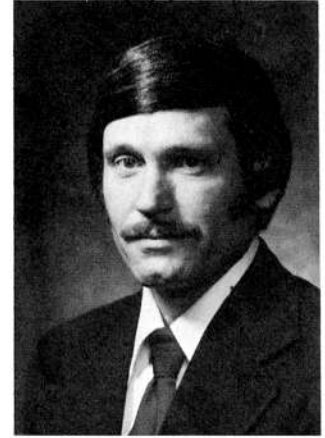
Rodgers to assist Rosenthal

Bill R. Rodgers has been appointed technical assistant to Murray W. Rosenthal, associate director for Advanced Energy Systems at ORNL. He succeeds Martha J. Ketelle, who has become legislative assistant for energy and environment to Senator James Sasser.

In his new assignment, Rodgers will assist Rosenthal in administering activities in the nonnuclear energy areas including fusion, solar, geothermal and fossil energy alternatives, as well as energy conservation.

A native of Fitzgerald, Ga., Rodgers received his undergraduate degree and master's degree in chemical engineering from the University of Florida. Currently, he is completing requirements for the Ph.D. degree in chemical engineering from the University of Tennessee.

Prior to joining the Union Carbide staff in 1974, Rodgers was development and testing manager for products with fuel treatment applications in Keene Corporation's Fluid Handling Division, Cookeville, Tenn.



Rodgers

He is a member of the American Institute of Chemical Engineers, American Chemical Society, American Association for the Advancement of Science, Tau Beta Pi and Sigma Tau. He also is a participant in the Nuclear Division's Speakers' Bureau.

Rodgers and his wife, Jean, live at 11602 Grigsby Chapel Drive, Concord, with their daughters, Cheryl, Donna and Angie.

retirements...



Joseph Delmonte Jr.
Y-12 Chemical Services
24 years service



Ray L. Hill
ORNL Fusion Energy
33 years service



Abram Gosen
Y-12 Development
25 years service



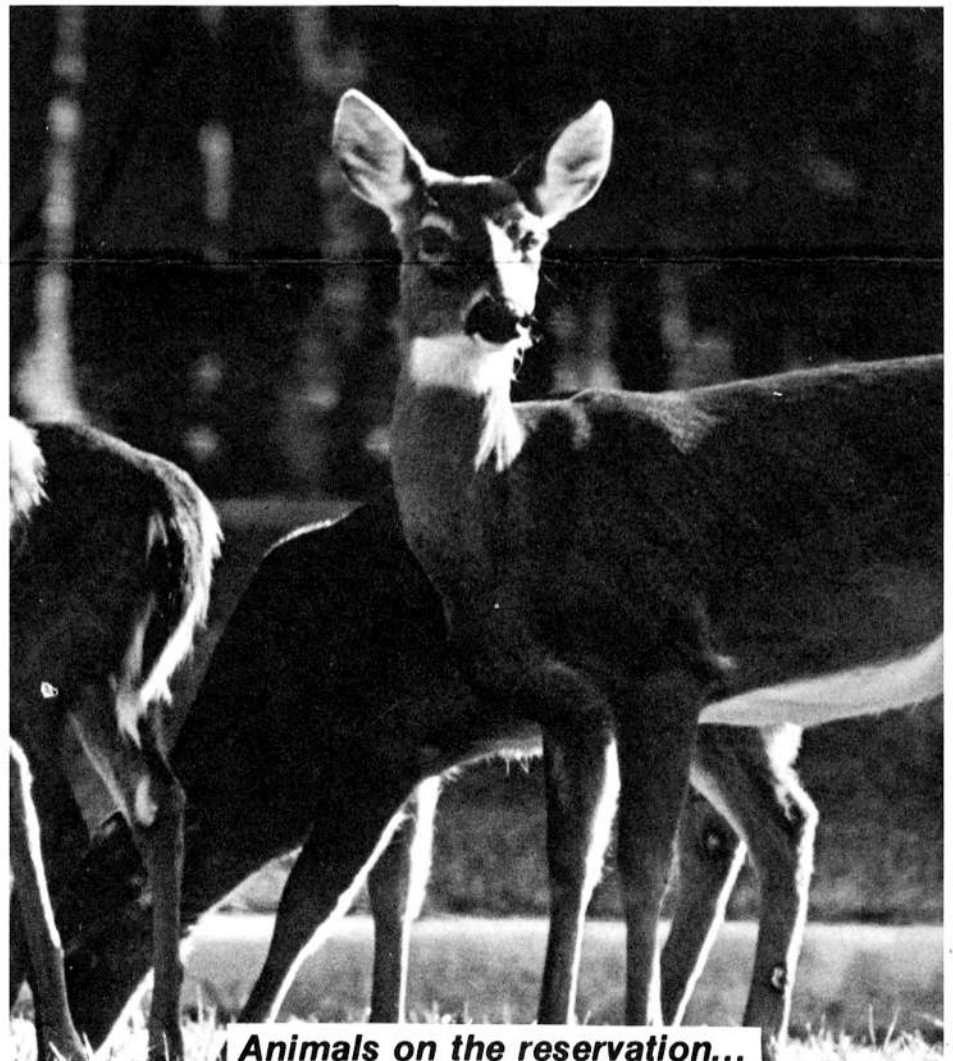
Pershing W. Jones
ORGDP Maintenance
31 years service



John E. Patt
Process Maintenance
Y-12
25 years service



James D. Rylander
General Engineering
21 years service



Animals on the reservation...

Savings Plan-Personal Investment Account

	Fixed Income Fund	UCC Stock	Equity Investment Fund
December 75	11.9880	58.7886	7.8231
December 76	13.0553	59.2723	8.8166
October 77	14.0104	42.5434	7.7151
November 77	14.0995	41.9255	8.0095
December 77	14.2017	40.9096	8.0427

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 8.70% for 1977. Union Carbide stock values are the average cost of stock purchased during the month plus brokerage charges. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. The price of each unit is determined by dividing the total value of the securities by the number of units in the Fund.

question box

If you have questions on company policy, write the Editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

Snow policy

QUESTION: Isn't Carbide's "snow policy" inconsistent with its "safety policy?" Carbide emphasizes safety off the job as well as on the job, yet when the Highway Patrol advises people to stay off the roads except for emergency use, we are expected to risk not only our personal property but our lives as well just to get to work on time. Why can't there be staggered schedules on snow days or have only "essential" personnel come to work on these hazardous days?

ANSWER: During most winters the Highway Patrol makes several announcements suggesting that unnecessary travel be restricted. If a person has an important job to do, and we certainly hope Nuclear Division employees do, getting to and from work does not constitute 'unnecessary' travel. If an individual employee has some special problem in getting to work promptly when road conditions are bad, this is taken into consideration by supervisors on a case-by-case basis.

Last winter we did stagger an early release of salaried employees on one occasion when it appeared that driving conditions were going to worsen and would probably be very hazardous if all employees hit the roads at one time. When weather conditions are not changing, it usually isn't any more hazardous to drive home at 5 p.m. than it is at 3 p.m.

It will continue to be our policy to permit employees to report to work late or to release them early only if extreme weather conditions dictate that this should be done.

To town for lunch?

QUESTION: What is company policy on nonexempt (weekly) salaried employees at ORNL going to town for lunch? Since we are only allowed 30 minutes for lunch, most of that time would be spent in commuting. If an employee is killed in an accident while away from the plant during a free lunch period are his/her insurance benefits the same as if the employee were killed on the job?

ANSWER: Nonexempt work schedules are not designed for off-plant site lunches. It would be very difficult to exit the plant, go to town for lunch, and return to the work area during the 30-minute, non-paid lunch period. If an employee is involved in an accident off company premises during free time, Workmen's Compensation benefits would not be paid; however, you would be insured by your Group Life and medical benefit coverages.

Wage comparisons

QUESTION: Hourly employees in the Nuclear Division received 8 to 8 1/2 percent increases bringing the wage of crafts to more than \$7.50 per

hour, operators to around \$7.00 per hour, and laborers to about \$5.25 per hour. My concern is with the salaries of technicians and secretaries (level 8 and below). Most divisions require technicians to have at least two years of college or technical school training. The salaries of most technicians with less than four years of company service is 15 percent less than that of top craft and about 6 percent less than that of operator. Most secretaries earn less than laborers. What is management's reasoning for holding the technician's or secretary's salary so much lower than that of comparable hourly wage earners? Why should a person invest his own money in attending business school, college or technical school in preparation for a secretarial or technical position when you could make more money as a laborer or apprentice?

ANSWER: Weekly salaried jobs have been carefully evaluated and are periodically examined to ensure that the pay range is fair and comparable to rates other companies in this area are paying for similar jobs. Your statement regarding secretary/laborer, technician/crafts rate comparisons is not accurate. Many technicians are paid more than craftsmen and operators, some are paid the same and some are paid less. The same is true when comparing secretaries' pay with laborers' pay. The rate of pay for a particular job is based on several factors including job duties, working conditions, and the level of pay for similar jobs in the area.

The basic difference between wages paid to hourly and nonexempt salaried employees is this: All hourly employees in the same classification generally receive the same rate of pay regardless of the level of their work performance. Salaried employees are paid different rates of pay depending on their work performance.

Research shows that individuals prefer one job rather than another for several reasons; namely, congenial working conditions and social contacts, responsibility, initiative, prestige, vocational aspirations, variety, and salary.

Inter-plant transfer

QUESTION: If a secretary prefers to work at a different plant in Oak Ridge, is there a way she can be transferred without prejudice?

ANSWER: A secretary, like any other employee, may request a transfer to another facility through supervision and/or the Employment Department at her/his location.

Although relatively few such inter-plant transfers are made, where there is sufficient justification, such a move may be considered so long as it does not conflict with the Job Opportunity System. If such a transfer is made, it would be without prejudice.

18 inches...

And it's still snowing!



'THE WINTER OF OUR DISCONTENT' thought 1976-77 was rough, until this unfortunate the week of January 16th descended to paralyze the traffic, styng generally miserable for everyone. (No Ridge area...there just wasn't that many malfunctions that the weather brought that a special camaraderie sprang up, special ways...pushing, shovelling, scr event out of it all.



Paducah employee



it might be well defined. We all winter came. Paducahans were most as 18 inches of the white stuff parking efforts, and make life that is was much better in the Oak h snow!) A special note from all the on...Darlene MacPherson reports with people helping each other in very piping, and making a rather happy



park along street while parking lot is cleared of snow

division death...

Aron Smith, an inspection supervisor in the Product Certification Division at Y-12, died January 14 at his Oak Ridge home.

A native of Kingsport, Mr. Smith joined Union Carbide in 1954. He was a veteran of the U.S. Marine Corp.

Survivors include his wife, Pauline Harp Smith, 107 Maple Lane; daughters, Donna Lewis and Jackie Hart; sisters, Mrs. Blanche Bishop, Mrs. Bonnie Carter, Mrs. Gladys Cardwell, Mrs. Coy Denton, Mrs. Jack McCurry and Mrs. John Underwood; a brother, Jack; and five grandchildren.

Graveside services and burial were held at the Garden of the Good Shepherd, Oak Ridge Memorial Park.



Mr. Smith

wanted...

ORNL

RIDE ONLY from North Purdue, Downtown Shopping District, Oak Ridge, to East Portal, straight days. Gerri Cox, plant phone 3-6665, home phone 483-6770.

RIDER WANTED from Landmark Subdivision, Country Club Apartments, Middlebrook Pike, Gulf Park Subdivision, or Cedar Bluff Road areas, Knoxville, to East Portal, 8:15-4:45. Althea Tate, plant phone 3-1822, home phone 693-9235.

JOIN CARPOOL from area of Newridge Avenue and West Outer Drive, Oak Ridge, to West Portal, 8:15-4:45. Dennis Parzyck, plant phone 3-1877, home phone 482-4556.

RIDE with non-smokers from Madison Lane near hospital, Oak Ridge, to East Portal, 8-4:30. Nell Dunham, plant phone 3-6664, home phone 483-5790.

RIDERS FOR VAN POOL from West Knoxville area to North, South or West Portal. Mike Caldwell, plant phone 3-1331, home phone 690-8573.

Y-12 PLANT

JOIN CARPOOL from Concord to any portal, straight day. J. C. Taylor, plant phone 3-7510, home phone Concord 966-5163.

ORGDP

JOIN CARPOOL from South or West Knoxville to Portal 4, D Shift (will consider other portals). John R. Ross, plant phone 3-3267, home phone Knoxville 577-0692.

VAN POOL RIDERS from Karns to any portal, straight day. Tom Lemons, plant phone 3-3291, or 3-3556; home phone Karns 947-8959.

RIDE or will JOIN CARPOOL from Ball Road, West Knox County, to Portal 5, D Shift. Jack McKinney, plant phone 3-3476, home phone Knoxville 690-1888.

JOIN CAR POOL from West Hills area near vicinity of new Bearden Junior High School to Portal 2, 8-4:30. Ira Kaplan, plant phone 3-3325, home phone 693-5135.

Conference highlights...

WATTec-78

WATTec-78, the fifth annual energy conference and exhibition to be held February 23-25 in Knoxville, has announced plans for its third "Public Awareness on Energy" program.

Jake F. Butcher, chairman of the board of the United American Bank and of Energy Expo '82, the 1982 Knoxville International Energy Exposition, will serve as chairman of this year's event, to be held Saturday, February 25, at the Hyatt Regency Knoxville.

Seven regionally and nationally prominent leaders in energy and public affairs will address this special session, to which business and professional leaders, legislators and public officials throughout the Tennessee Valley Region are being invited.

Their talks will be followed, in the afternoon at the Knoxville Civic Auditorium, by a "Governors' Roundtable on Energy."

Governor Ray Blanton of Tennessee will participate with other governors from the Tennessee Valley Region in a roundtable discussion on energy policies and programs within individual states as well as region-wide energy prospects and needs.

WATTec, held each year during Engineers' Week, will open on Wednesday, February 22, with special activities for the national presidents and representatives of the 24 Knoxville-Oak Ridge area technical and professional societies that sponsor the conference.

On Thursday, 13 society-sponsored technical programs are scheduled, dealing with many facets of energy research and development in this region. Included will be the areas of conservation, fossil, solar, and nuclear energy as well as such specialties as testing technology, quality control, electrical load management, power generation, instrumentation, materials, and issues related to energy education.

Friday's program, to be climaxed by the WATTec/Engineers' Week Banquet at which U.S. Representative Walter Flowers (D.-Alabama) will be the principal speaker, will feature a day-long plenary session with talks by invited speakers from government, industry, and the academic community.

The WATTec exhibition of energy-industry products and services will be open for viewing beginning Wednesday evening in the lobby of the Hyatt Regency.

Information concerning the conference and public-awareness program can be obtained from: WATTec, P.O. Box 629, Oak Ridge, Tenn. 37830.

ONE or TWO car pool members from Rockwood, to any portal, straight day. C. L. Allen, plant extension 3-9623.

JOIN CARPOOL from Lenoir City to Portal 2, 7:45-4:15 shift. Bill Chormley, plant phone 3-3445, home phone Lenoir City 986-2988.

recreationotes . . .

Carbide bowling. . .

Y-12 C League. . .

The Big Five are currently leading the Y-12 "C" League. Robert Carmack rolled the high game with a 264 handicap. He also took the high series for the week with a 680 handicap.

Carbide Family. . .

The Carbide Family Mixed League is a close race with the Oops leading by one half point over Double Troubles and the Challengers. John Patton and Judy McBee won the high scratch series for men and women.

K-25 Tuesday. . .

The City Slickers control the K-25 Tuesday Men's League with a 21.5 point lead. M. T. Gibson and R. K. Johnson tied for high game with a 211. R. R. Cravens took high game with handicap—236. R. K. Johnson's 573 won high scratch series.

K-25 Wednesday. . .

The Planners continue to hold the lead in the K-25 Wednesday Men's League over Sues Sooners. Chuck McCluskey had a 605 scratch series last week. Dave Phillippi won high series with handicap this week with a 644.

ORNL A...

The Fireballs moved from third up to first this week in the ORNL "A" League over the Zots. R. J. White rolled the high handicap series with a 653. Wood, of the Woodchoppers, had the high scratch game of 213 during the week of January 9.

ORNL Ladies. . .

The Mousechasers have begun the second half by winning four points to give them an early lead in the ORNL Ladies League. Elizabeth Phipps, of the Mousechasers won all the weekly highs with a 201 scratch game/511 series.

Western Plaza...

The first half ended with the Four Eagles finishing in first place. Their record was 44 wins and 20 losses for a .687 percentage. In second was the Alley Cats with 39 1/2 and 24 1/2 followed by Spare Parts with 37 and 27. The second half promises to be a tight race all the way.

Carbide Shifters. . .

The 2 + 2 and B.T. Express are battling for first in the Shifters League. They are tied for first with 12 wins and 4 losses each. The Ups and Downs and Gutter Dusters are also tied for second and third with 11 wins and 5 losses. Steve Martin and Bobby Living won the scratch highs for men and women.

Y-12 Classic. . .

The Ridgers took an early lead over the Eightballs in the Y-12 Classic League. Dave Foster won high scratch series with a 597. The Has Beens and Fes-Kids tied for the high handicap team score with a 1026.

Y-12 Mixed...

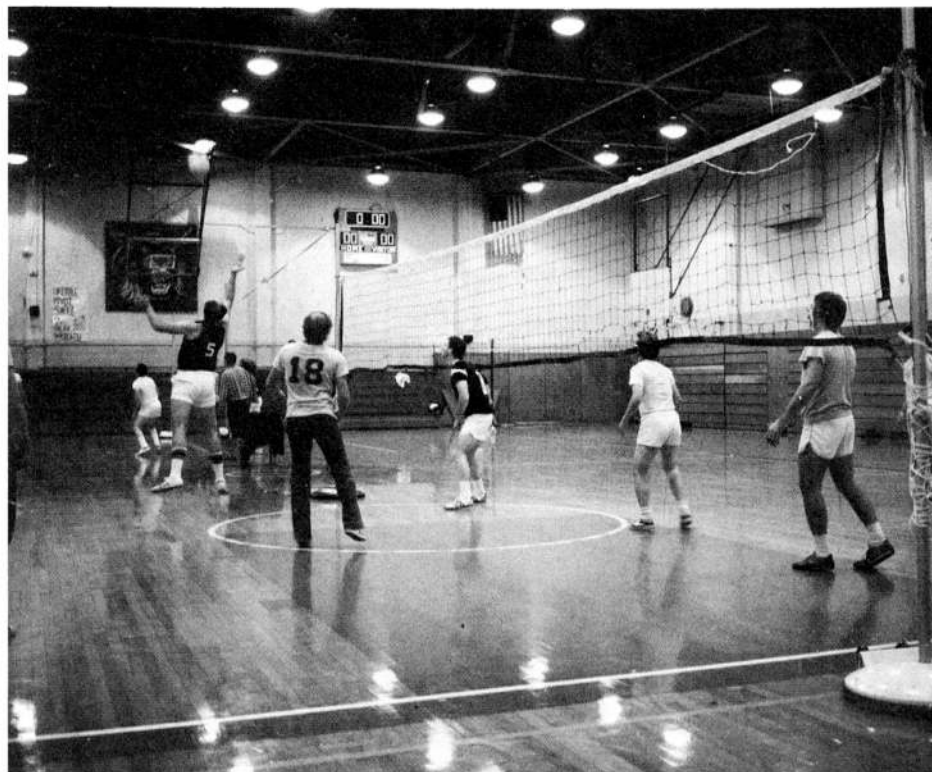
The Wood Cutters remain in first place over the Alley Oops in the Y-12 Mixed League. Bob Bowers rolled a 210-182-208-600 scratch series for the weekly high.

ORGDP Women's. . .

The Payoffs moved into first place for the second half in the ORGDP Women's League. Alice Guffey won all the weekly prizes with a 171-205-266-642 handicap series. She had a 239 scratch game.

ORNL C...

The "C" League was taken over last week by the Remkeys. Johnson, of the Damagers, rolled the high scratch game, 237, last week. While Thompson, of the Alley Rads, rolled a 677 handicap series this week.



SPIRITED ACTION—These scenes show the spirited action as volleyball enthusiasts let off some winter steam. There's a league for every degree of power on the nets...one for the very good, a mixed league for the pretty good, and a league for the "just-for-fun crowd."

Camera Club sets February meeting

• "High Speed Photography" will be the topic of the next Carbide Camera Club meeting. John Ridley, ORNL's Photographic Department, is the guest speaker. He will also screen a film "Cooling Waters" and discuss its production. The meeting is set for Tuesday, February 14, at 7:30 p.m. in Cheyenne Hall. Visitors are welcome.

• A Camera Club "Cinema Group" has been formed for members interested in movie making techniques. Those wishing to join should contact Carlos Bamberger, extension 3-6027.

• A workshop on spotting and mounting prints is planned for mid-February, and details will be announced at the meeting.

• The collection of award-winning photographic prints, "Winners in Retrospect," will be displayed until February 15 at the Children's Museum in Oak Ridge. Hours are Monday through Thursday, from 2 to 5 p.m. and Sunday from 2 to 4 p.m. Admission is free.

• For information on Carbide Camera Club activities or membership, contact John Blankenship, 3-3533; or Lester Petrie, 3-1910.

Scorekeepers...

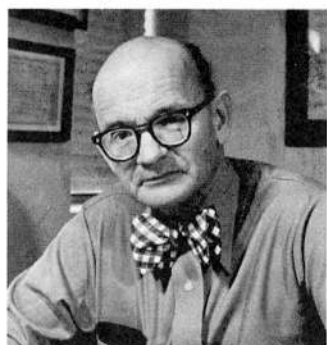
The Carbide Mixed Bowling Tournament will be staged the last three weekends in February. There is always a lack of scorekeepers during a tournament. All leagues are being urged to send good scorekeepers down to man the alleys as the action begins. The Recreation Department also needs checkers and workers in the backroom...so if you would like to volunteer assistance, call them at extension 3-5833.

Skeet League...

Employees from Y-12 collected the top honors in the skeet league for December. R. A. Allstun won first shooting 48.887. Orville Laveredine won second with 48.179, while Bert Searles won third with 47.307.



IS IT OR ISN'T IT?—According to Al Rainer, an operator at the Paducah plant, this deceptive photo has fooled truckers and laymen alike. The 18-wheeler pictured is actually an 11 1/2 x 5-inch scale model of a conventional Peterbilt diesel. Rainer spent more than 22 hours on the model, then photographed the finished product on a snowbank approximately 100 feet from the tree in the background.



Medicine Chest...

The Malady of the Migraine

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "Medicine Chest," where he answers questions from employees concerning health matters. Questions are handled in strict confidence, as they are handled in our "Question Box." Address your question to "Medicine Chest," Nuclear Division News, Building 9704-2, Mail Stop 20, or call the news editor in your plant.)

QUESTION: "Please discuss migraine headaches. Is there any medicine or effective treatment to thwart them? Are migraine patients more prone to cerebral hemorrhage than others?"

ANSWER: A migraine headache is difficult to define and no hard-and-fast diagnostic criteria have been established. Even though the symptoms may be severe, there is a disturbance in the physiology of the circulation within and on the surface of the brain.

During the early phase of a typical migraine attack, there is a diminished flow of blood in the arteries within the brain. Such reduction has been demonstrated with cerebral blood flow measurements. The actual headache which begins 15 to 30 minutes later is associated with a dilatation of the arteries, but this alone does not produce pain. Recent studies suggest that during migraine attacks, certain chemical substances are released locally in the brain about the distended vessels. They cause a sterile inflammation which, combined with the vasodilatation, results in the head pain.

Aspirin mildly effective

Apparently, immune complexes play a role in the release of an inflammatory chemical called serotonin. It in turn causes the platelets in the blood to stick to tissues and cause a reversible inflammation. Drugs which inhibit the release of serotonin have been helpful in preventing migraine attacks. Aspirin inhibits platelet stickiness but, as most migraine patients know, it is only mildly effective in most acute attacks.

The pre-headache signs include transitory blind spots in the visual field, visual disturbances described as heat waves or flickering lights and various neurological disturbances, usually on one side of the face or body. They may include numbness, tingling, weakness, paralysis and even temporary blindness. The victim may be irritable, depressed or restless, and usually has no appetite.

When the headache begins, it may be generalized or confined to one side of the head. The pain is often severe and may be throbbing. It is often associated with nausea and vomiting. The pain may last for hours or days and often terminates only after the victim is able to go to sleep.

The genetic component of migraine is still controversial. Many migraine patients have family

histories of migraine involving several generations. Environmental factors influence the appearance of the headache, so it may be that only a vulnerability is inherited. Some patients get migraine attacks if they have not eaten for 10 to 12 hours and some after exposure to bright or flickering lights. Many have attacks after some emotional upset, after a period of emotional stress or after intense activity.

Approximately 10 percent of the migraine sufferers will develop an attack after eating the amino acid tyramine, which is found in cheese or can be produced by bacterial breakdown of tyrosine in the intestine. Allergy may be a factor in a few cases, but studies haven't led to any firm conclusions.

Migraine treatment

The treatment of a migraine attack is most effective if started before the severe pain begins. Ergotamine, often mixed with caffeine, may be given by injection, by tablets put under the tongue, by rectal suppositories, by inhalation or by tablets which are swallowed. Although it is the most consistently useful drug in aborting an attack or reducing the severity, it occasionally doesn't work at all in some individuals.

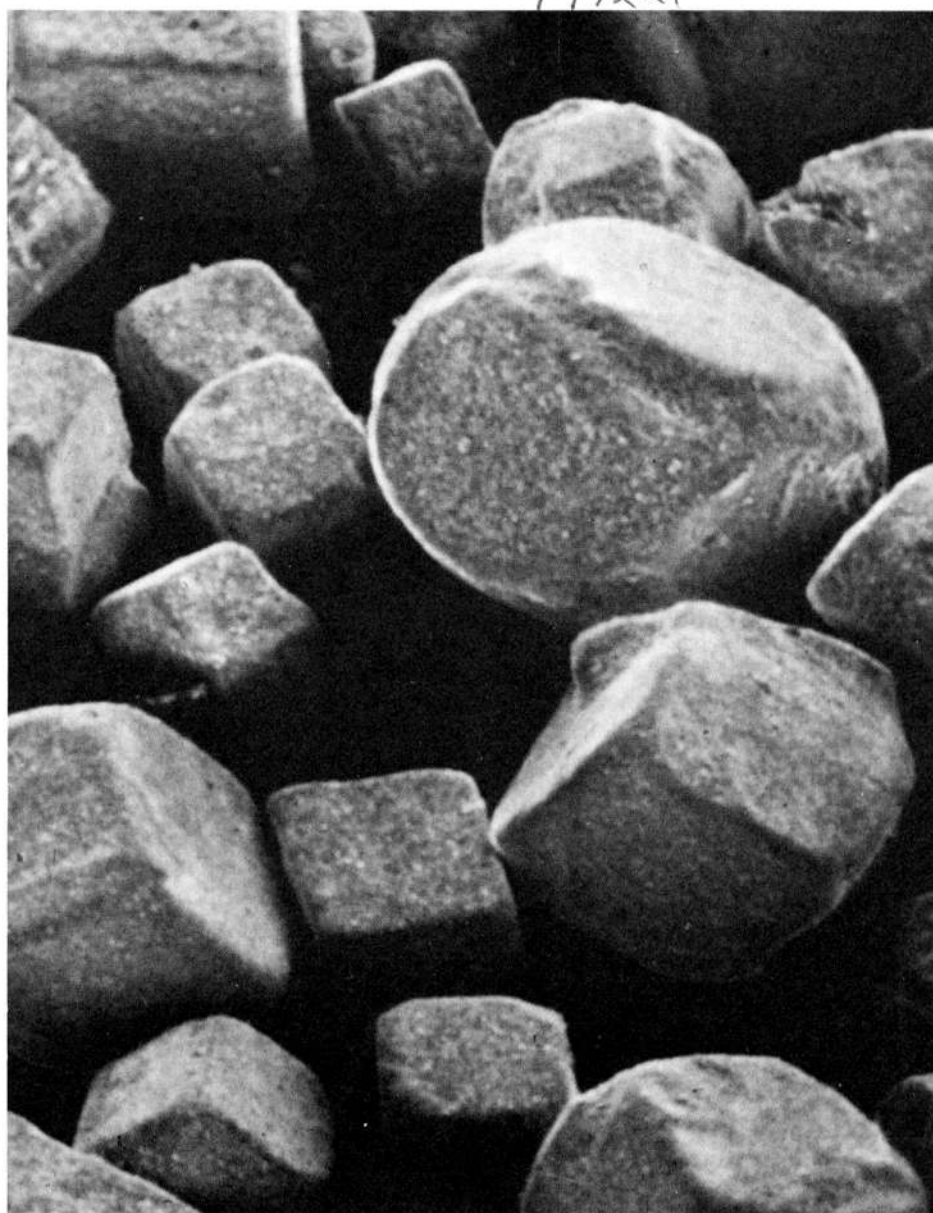
Once the pain occurs, treatment is directed at relieving the pain, controlling the nausea and vomiting and providing sedation.

Recurring migraine attacks can sometimes be reduced in frequency by taking the drug methysergide. In experiments in animals, this drug reduced vascular injury and the release of serotonin. Unfortunately, it has many unpleasant and even potentially dangerous side effects, so it must be taken with considerable care.

Drugs for headaches

Propranolol, a drug used for heart disease, helps some people prevent headaches. This use was discovered when migraine patients who also had heart disease noted a marked reduction in attacks after they took propranolol. Unfortunately, it also has side effects which limit its use.

Amitriptyline, a common antidepressant medication, helps prevent attacks in a few patients. Clonidine, an antihypertensive drug, has been tried with conflicting results. Combinations of antihistamines and cyproheptadine, another serotonin antagonist, are often useful.



COMMON TABLE SALT—The next time you reach for a saltcellar, you might remember some of Dr. T. A. Lincoln's admonitions. If those don't slow you down, take a look at what salt looks like magnified 260 times. Robert K. Bennett, Y-12 Development Division, provides this photomicrographic look at sodium chloride.

anniversaries

ORGDP

30 YEARS

James R. Helton, Inspection Department; Robert L. Higgins, Inspection Department; and Ewell S. Thompson, Telephone Services.

25 YEARS

Carl E. Leinart, John A. McKenzie, James R. Marney Jr., Rolf C. Rosenvinge, William E. Hall, James A. Fritts, Jerry Love, Roland D. Friedrich, Jack C. Young, Clarence C. Wright and Bobby G. Grant.

ORNL

30 YEARS

Franklin R. Binford, Operations; Harry O. McNabb, Operations; James A. Harter, Instrumentation and Controls; and Joseph E. Weidley, Plant and Equipment.

25 YEARS

Roy L. Leinart, Mildred E. Gregg, John J. Woodhouse Jr. and George E. Mellon.

20 YEARS

Arthur J. Shor, Cullie J. Sparks and William A. Walker.

PADUCAH

25 YEARS

William E. Morgan, Robert L. Shetler, John D. Boss Jr., Dentis K. Riley, Ernest R. Johnson, Quittman D. Yates, Warren E. Scott, Thomas P. Englert Jr., James R. Stephens, Farlie Bibin, Billy C. Sanders, William P. Woods and Marjorie Overstreet.

20 YEARS

Kathelene Smith.

Y-12 PLANT

25 YEARS

George W. McGown, A. D. Justus, Edward L. Armstrong, William C. George, Rayce L. Vanderpool, Calvin G. Johnson, Joseph E. White, Margaret C. Cook and Patsy J. Stallard.

20 YEARS

Cecil M. Stogsdill, Loyd E. Wyatt, Victor S. Upchurch Sr. and Louise F. Beets.

next issue...

The next issue will be dated February 16. The deadline is February 8.

Migraine patients are more prone to cerebrovascular accidents (strokes) and coronary heart disease. This may be related to the disturbance in platelets which leads to more easy formation of blood clots.

Good diet, adequate exercise and tranquility associated with meeting life's goals are frequently helpful but not always easy to achieve. Recent studies are helping to understand the basic mechanisms so more effective methods of preventing attacks will probably be found.

How did you meet?

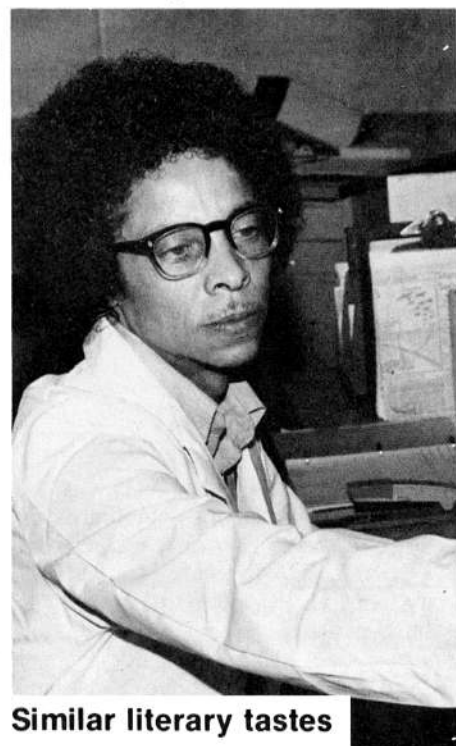
(Continued from page 1)

suggested to Marvin's mother that he ask me to a football game. He did and that's how we met."

Charlene C. Riley, Fire and Guard Department at Paducah, got some help from friends, too. "Being a widow at a very young age, I had help from friends, all wanting to lend a helping hand in providing their friends for dates. One day a fellow employee told me he had a friend, who, of course, was very nice, special, etc. I told him I had dated everyone else's friend and I might as well date his. I met the date for dinner at this friend's home. And it turned out that he was, in fact, a very special person. We were married a year later. We have two wonderful children: Mike, a teacher in Paducah; and Alyce, a homemaker and mother of three. On Valentine's Day he always gives me a box of candy and we celebrate by going somewhere special to eat."

The Fabrication Shop at Paducah comes up with an interesting one, too, from **Robert D. Peck**. "I was content holding hands with Jane at the Saturday matinee movies when her friend, Barbara, bet she could steal me away from Jane. The next week, we doubled with Barbara and her date; and before I knew it, I was knocking on (you guessed it) Barbara's door. A few dates later, following our first kiss, I calmly walked off the porch, falling into a bush, missing the steps by at least six feet. I wondered, could this be love? We went steady for five years and were married in 1957. After almost 29 years, though I don't walk off porches anymore when we kiss, we're still happy with each other and our three great children, ages 19, 18 and 15. I always send Barbara flowers on Valentine's Day to her office at a local computer science firm."

Helen and Bernie Corbett, both ORNL employees, also fell prey to cupid in the guise of David Jennings, Y-12 Maintenance Division. "In 1956, I was a secretary in the Alloy Division at Y-12, and Bernie was at the plant on an interview," Helen remembers.



Similar literary tastes

"Dave introduced us by saying, 'Since you're both from Pittsburgh, you should have a lot in common; then he left us without another word! Talk about feeling silly!'"

The Corbetts were married the next year. "We had to come all the way to Oak Ridge to find each other." Helen is currently a secretary in the Chemistry Division; Bernie works as assistant head of the Reactor Operations Department.

Betty and Lewis Barbre, at the Paducah Plant, met in a skating rink during the summer of 1946. He was a mature 25, she only 19. Lewis says he was attracted to this well-dressed skater whom he thought was a schoolteacher. He asked her to skate, then later if he could take her home. Betty had just turned down a similar proposal from another man in order to wait on the more appealing one. "He had a good line," she says. Married in 1947, they have two married daughters and four grandchildren. Betty is the PGDP librarian in Technical Services, and Lewis is a senior inspector in the Engineering Division.

Ellen Queener, a secretary in ORGDP's Maintenance Division, met her valentine (and future husband) on the job. "I was awaiting my clearance in the Administration Building, and he was an electrician's helper at the time. We saw each other several times at work, but did not start dating until after that." Ellen's husband, **Herman**, is now an electrician at ORNL. "We recently celebrated our 25th wedding anniversary, so it turned out to be a good valentine," she said.

It wasn't love at first sight for **Doris McKamey**, ORGDP Maintenance. She met her future husband on a swimming party near the Pellissippi Boy Scout Camp. "We sure didn't like each other at first, but do now. We've been married 22 years."

A fraternity open house at Southwestern College, Memphis, provided the meeting for **Bill Weber**, ORGDP Labor Relations, and his future wife. "We began dating immediately and were married two and one-half years later."

Abie Shipe, Y-12 Electrical and Electronics, met his valentine in a classically youthful pastime...trading comic books. "She only read the best...Snuffy Smith and things like that. I was trying to con her out of comic books I didn't own. Ended up the loser, of course."



At a skating party

Cheryl Hitchcock, Environmental Management at ORGDP, met Leon at a Christmas party. "My escort introduced us, and we had our first date several months later, before I started to college. We dated during college and married after we graduated."

Betty Lester, executive secretary to Paducah's plant manager, was the "victim" of well-meaning friends. This is the way she tells it, "I met Sid through a mutual friend, who thought we would make a 'good match.' I was 25, single, enjoying life, and not particularly looking for a husband, but I think some of my friends were worried about my becoming an old maid! It was not 'love at first sight;' our courtship was very normal. We enjoyed the same things and one another, and still do. We were married 10 months after we met. Sid gives me a valentine and a box of candy, and occasionally a surprise gift."

Margaret and Bill Elmore, who celebrate a wedding anniversary on Valentine's Day, met on the job, but not this one...he works in Materials at ORGDP, and she works in Employee Relations Division at Y-12. Margaret tells it like this: "I was secretary to the chief timekeeper, and Bill came in one day with his report. We ended up talking more than he talked to the boss. We had planned to marry on

February 7, but one of my friends who planned to marry February 14, had a conflict...so we just exchanged our church reservations. Valentine's is an easy anniversary to remember, though, and we've never regretted the switch."

Dick Loveless, also from Y-12's Dispatching, certainly belies his last name. He was stationed at Westover Air Force Base in Massachusetts when he met **May** on a blind date. "She was what I called a Cinderella girl...she had to be in by midnight, and that was a challenge to me. We were married six months later, and still are."

From Paducah's Machine Shop, **Charles A. Pope** tells it like this: "The story of how I met my sweetheart is not one that a popular magazine would consider for a feature. However, to me, that is unimportant. For as the years slip swiftly by, it furnishes me with many fond memories, so I consider it the feature story of my life. I first saw my sweetheart in a drug store bus station on a visit to a small town where I had lived as a young boy. She was looking at cards at the card rack. It was not until months later that a mutual friend introduced us. A four-year courtship followed and we were married March 16, 1955. We have two wonderful sons, David and Dan, and she is still my sweetheart."



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